

PLASMA-ENHANCED FUNCTIONALIZATION OF INORGANIC OXIDE SURFACES

ABSTRACT OF THE DISCLOSURE

[0093] Methods for producing plasma-treated, functionalized inorganic oxide surfaces are provided. The methods include the steps of subjecting an oxide surface to a plasma to create hydroxyl functionalities on the surface and reacting the hydroxyl functionalities with epoxy group-containing molecules *in situ* in the absence of plasma. Biomolecules may be immobilized on the resulting functionalized surfaces. The methods may be used to treat a variety of oxide surfaces, including glass, quartz, silica and metal oxides.